

What Is Claimed Is:

1. A method for the adjustment of a gearbox actuation system of an automated gearbox of a vehicle, comprising the step of performing at least one reference travel with the engine in gear.
2. The method according to Claim 1, wherein the gearbox actuation system is so made that a reference point is started in the neutral gap without the particular gearshift forks and gearshift rails being moved at the same time.
3. The method according to Claim 2, wherein the gearshift rails form a gap with their particular gearshift jaws in which gap a shift finger is moved to start the reference points.
4. The method according to Claim 3, wherein the shift finger is moved laterally in the direction of the neutral gap and, at the same time, the reference points are started periodically upward and downward.
5. The method according Claim 4, wherein the direction of selection is adjusted when the shift finger is moved over the entire neutral gap width.
6. The method according to Claim 2, wherein an adjustment in the gearshift direction is performed parallel to the gearshift rails by means of a provided recess.
7. The method according to Claim 3, wherein the shift finger is again moved back into its starting position prior to the reference travel after referencing.
8. The method according to Claim 1, wherein said at least one reference travel is performed regularly or irregularly to start the reference points.
9. A gearbox actuation system for selecting and shifting gears in an automated gearbox of a vehicle comprising:  
means for adjusting at least one reference travel when an engine is in gear.
10. The gearbox actuation system of Claim 9 further comprising gearshift forks, gearshift rails and a neutral gap, said means for adjusting being configured to start at least one reference point in said neutral gap without said gearshift forks and gearshift rails being moved at the same time.
11. The gearbox actuation system of Claim 10 wherein said gearshift rails form a gap with corresponding gearshift jaws, in which gap a shift finger is moved to start said at least one reference point.

12. The gearbox actuation system of Claim 11 wherein said shift finger is moved laterally toward said neutral gap and, simultaneously, said at least one reference point is started periodically upward and downward.
13. The gearbox actuation system of Claim 12 wherein a direction of selection is adjusted when said shift finger is moved over an entire width of said neutral gap.
14. The gearbox actuation system of Claim 10 wherein an adjustment in a gearshift direction is performed parallel to said gearshift rails by means of a recess.
15. The gearbox actuation system of Claim 11 wherein said shift finger is moved back to a starting position prior to reference travel after referencing.
16. The gearbox actuation system of Claim 9 wherein said at least one reference travel is performed regularly or irregularly.
17. The gearbox actuation system according to Claim 11 wherein said gearshift jaws and said gearshift rails are configured such that said neutral gap can be reached during said reference travel without a current gear being disconnected.
18. The gearbox actuation system according to Claim 11 wherein said shift finger is configured to be moved within said gap during said reference travel regardless of gear engagement.
19. The gearbox actuation system according to Claim 18 wherein said gap is provided for purposes of adjustment in the direction of selection.
20. The gearbox actuation system according to Claim 14 wherein said at least one recess is provided for adjustment in the gearshift direction.
21. The gearbox actuation system according to Claim 10 wherein said gearshift rails have a catch in order to hold a last gear engaged also in an engaged state.
22. The gearbox actuation system according to Claim 9 further comprising at least one brushless electric motor for selection and/or shifting.